

## DAILY CURRENT AFFAIRS (DCA)

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## INDIA'S DIGITAL REVOLUTION: TRANSFORMING GOVERNANCE TO E-GOVERNANCE

### In Context

- **India's digital infrastructure** has undergone a **transformative evolution in recent years**, positioning the country as a global leader in digital adoption.

### About

- With a rapidly expanding digital economy, driven by **innovations in cloud computing, artificial intelligence (AI), machine learning (ML)**, and digital governance, India's infrastructure is continuously evolving to meet the **growing demands of the public and private sectors**.
- **Key initiatives** and projects have been rolled out to strengthen the country's digital backbone, ensuring accessibility, scalability, and security in delivering government services, fostering economic growth, and enhancing citizens' lives.
- **Digital Public Infrastructure (DPI)** refers to foundational digital systems that are accessible, secure, and interoperable, supporting essential public services.

### India's Digital Infrastructure Landscape

- In India, DPI has been instrumental in transforming the digital economy, much like traditional infrastructure for industrial growth.
- **Key Platforms and Achievements**
  - ♦ **Aadhaar:** World's largest digital identity program.
    - Over 138.34 crore Aadhaar numbers issued, ensuring identity authentication.
  - ♦ **Unified Payments Interface (UPI):** Facilitated 24,100 crore financial transactions as of June 2024.
    - Enhances financial inclusion and cashless transactions.
  - ♦ **DigiLocker:** Over 37 crore users, providing digital document verification and storage.
  - ♦ **DIKSHA:** World's largest education platform, delivering 556 crore learning sessions.
  - ♦ **National Knowledge Network (NKN):** Links National and State Data Centres, enabling resource sharing and collaborative research.
- **Additional Platforms**
  - ♦ **GeM:** Streamlines government procurement.
  - ♦ **UMANG:** Offers 2,077 government services

across 32 states/UTs with over 7.12 crore users.

- ♦ **Co-WIN and Aarogya Setu:** Revolutionized health services through vaccination tracking and contact tracing.
- ♦ **e-Sanjeevani and e-Hospital:** Transform healthcare delivery through telemedicine and hospital management.
- ♦ **Poshan Tracker and e-Office:** Enhance nutritional monitoring and digitize government workflows.
- ♦ **MeriPehchaan:** A single sign-on platform for seamless access to government services.
- ♦ **API Setu:** Facilitates data exchange through 6,000+ APIs, enabling 312 crore transactions.
- ♦ **MeghRaj (GI Cloud):** Promotes cloud ecosystems across central and state governments, enabling:
  - Digital payments.
  - Identity verification.
  - Consent-based data sharing.

### Impact on Economy and Society

- **Economic Growth:** Boosts financial inclusion (via UPI, Aadhaar), reduces IT costs, and fosters innovation with data centres and cloud services. Infrastructure spending yields a GDP multiplier of 2.5-3.5 times.
- **Global Leadership:** India's digital solutions, like India Stack, are aiding the Global South.
- **Efficient Governance:** Faster, transparent, and paperless delivery of services through platforms like DigiLocker, UMANG, and MeghRaj.
- **Social Impact:** Improves education (DIKSHA), healthcare (Co-WIN, e-Sanjeevani), and skill development (SIDH).
- **Inclusivity:** Common Service Centres (CSCs) enhance rural access to e-services.

### Challenges

- **Digital Divide:** Limited connectivity and affordability in rural areas.
- **Cybersecurity Risks:** Data breaches and privacy concerns due to large-scale data collection.
- **Infrastructure Gaps:** Insufficient bandwidth and data centre capacity to meet rising demand.
- **Skill Deficit:** Lack of digital literacy and expertise in advanced technologies like AI and cloud computing.
- **Policy and Coordination Issues:** Slow inter-departmental coordination and outdated regulatory frameworks.

### Way Ahead

- **Expand Infrastructure:** Invest in rural connectivity and scale up data centre capacities.
- **Ensure Cybersecurity:** Strengthen data protection laws and implement robust cybersecurity measures.
- **Promote Digital Literacy:** Launch targeted programs to bridge skill gaps, especially in rural areas.
- **Streamline Policy:** Simplify regulatory frameworks to keep pace with technological advancements.

Source: PIB

## SHIFT OF POWER IN SYRIA

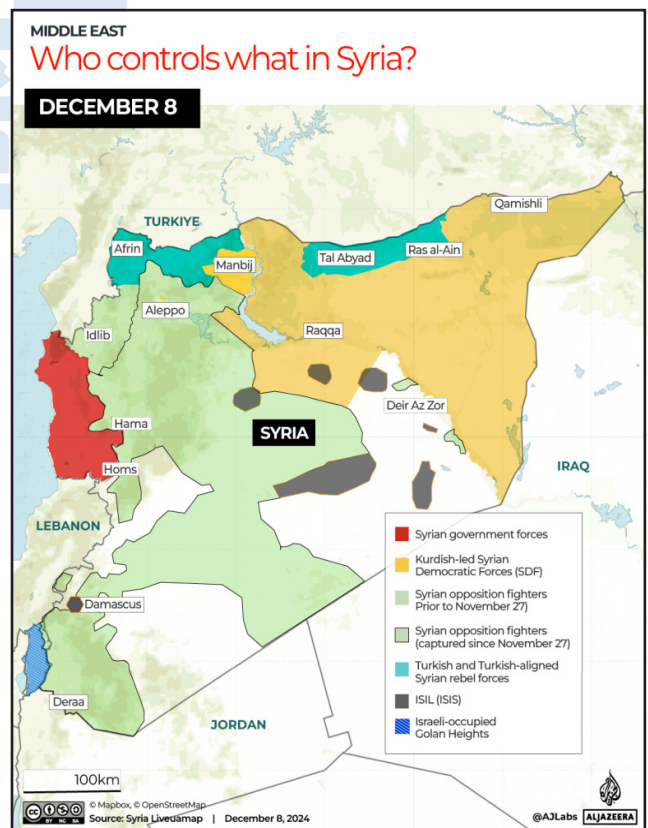
### Context

- The Syrian rebels took over the capital Damascus, which ended the rule of Bashar al-Assad as president of Syria.

### Timeline of the Syrian War

- **2011: Uprising and Beginning of Civil War**
  - ♦ **Pro-democracy protests** erupt in Syria following the Arab Spring, the government responds with violent repression.
  - ♦ The Syrian opposition forms the Free Syrian Army (FSA) to fight Assad's regime.
  - ♦ The United States and European Union call for Assad to step down.
- **2012: Escalation of Violence:** The conflict turns into an all-out civil war, with multiple armed groups fighting the government and each other. The Assad regime gains support from Russia and Iran.
- **2013: Rise of Extremist Groups:** The Islamic State of Iraq and Syria (ISIS) starts to gain territory, leading to fears of a growing extremist presence in the region.
- **2014: U.S.-led Coalition Against ISIS**
  - ♦ The Islamic State declares a caliphate across parts of Syria and Iraq, leading to the formation of an international coalition (led by the U.S.) to fight ISIS.
  - ♦ Kurdish forces, mainly the YPG (People's Defense Units), gain prominence in the fight against ISIS, especially in northern Syria.
- **2015: Russian Intervention**
  - ♦ Russia intervenes militarily in support of the Assad government, launching airstrikes against opposition groups.

- ♦ Iran increases its involvement, providing military and financial support to Assad.
- **2016: Battle for Aleppo**
  - ♦ One of the largest battles of the war occurs in Aleppo, with heavy bombardment by Russian and Syrian forces. The city falls to Assad's regime by the end of the year.
- **2017: U.S. Military Involvement and Chemical Attacks**
  - ♦ A chemical attack on the town of Khan Shaykhun leads to U.S. missile strikes against a Syrian airbase.
  - ♦ Syrian government forces, with Russian support, recapture much of eastern Syria, and ISIS is pushed back.
- **2018: Idlib and Kurdish Tensions**
  - ♦ A large-scale government offensive against the last major opposition stronghold in Idlib begins.
  - ♦ U.S. and Turkish forces clash with Kurdish YPG fighters in northern Syria, raising tensions between NATO allies.



- **2019: Defeat of ISIS and U.S. Withdrawal**
  - ♦ ISIS loses its territorial caliphate in Syria, U.S. orders the withdrawal of American troops from northern Syria.

- **2020-2021: Ongoing Conflict**
  - ♦ The Assad regime, with Russian and Iranian support, regains control over most of Syria, but parts of the country remain under rebel control.
  - ♦ The U.S. maintains a military presence in northeastern Syria to counter ISIS remnants and support Kurdish forces.
- **2022-2023: Continued Struggles**
  - ♦ The Hamas attack on Israel triggers fighting between Israel and Hezbollah in Lebanon, ultimately reducing the group's presence in Syria and fatally undermining Assad.
- **2024:** Rebels launch a new assault on Aleppo. With Assad's allies focused elsewhere his army quickly collapses and rebels have taken most major cities, driving Assad from power.

### Geographical Location of Syria

- Syria is located in the Middle East, in the western part of the Asian continent.
- It shares borders with Turkey to the north, Iraq to the east, Jordan to the south, Israel and Lebanon to the southwest, and the Mediterranean Sea to the west.
- Syria occupies a strategic position, linking the **Levant region with the rest of the Arab world.**



- **The Levant** is a historical and geographical term referring to a region in the Eastern Mediterranean.
  - ♦ It includes modern-day countries **Syria, Lebanon, Jordan, Israel, Palestine, and parts of Turkey**.
  - ♦ The Levant has been a **crossroads of civilizations** throughout history, known for its cultural, religious, and political significance.

### India and Syria

- **Friendly Ties:** Syria, under the leadership of President Bashar al-Assad, maintained friendly relations with India.
  - ♦ India continued to engage with Assad's regime, particularly after major regional

players like the UAE, Bahrain, and Saudi Arabia re-established ties with Syria.

### Support in Internal Matters:

- ♦ Syria, a Muslim-majority country, has consistently **supported India's position on the Kashmir issue.**
- ♦ **Israel captured the rocky Golan Heights** in the Levant region from Syria in the 1967 Six-Day War.
- ♦ India has consistently **supported Syria's legitimate right to the Golan Heights.**
- ♦ **At the United Nations,** India has also refused to support sanctions against Syria.
- **Future Outlook:** For India, maintaining stable relations with Syria and other key players in the Middle East has been crucial in countering Pakistan's narratives within these Muslim-majority nations.
  - ♦ India's future engagement with Syria may likely be shaped by the new dynamics.

### Significance of the Change in Regime

- **Geopolitical Impact:** A shift in leadership could alter Syria's alliances, particularly with Russia, Iran, and Turkey, which have played major roles in the conflict, affecting wider Middle Eastern dynamics.
- **Impact on Syrian Sovereignty:** The Assad regime has maintained its power through a mix of military force and foreign support.
  - ♦ A change in leadership could bring about different political, economic, and social policies.
- **Humanitarian Consequences:** The ongoing conflict has caused massive suffering, displacement, and loss of life.
  - ♦ A change could mean a shift in human rights policies and efforts to rebuild the country.
- **International Relations:** The outcome of the war and any change in leadership impacts global powers' strategies in the region, influencing U.S., Russian, Iranian, and European policies.

### Impact on Middle East

- **Iran:** Iran has been a staunch supporter of Assad. Syria was a crucial geographical link that Iran used to **move weapons and other supplies to Hezbollah in Lebanon.**
  - ♦ Hezbollah which has sustained significant losses in the war with Israel **will become weaker** without weapon supply.

- **Israel:** Israel has lauded the fall of the Assad regime but challenges still persist for it as the new regime is an offshoot of Al-Qaeda and is a designated terrorist organisation in Israel.
- **Turkey:** Since 2011, Turkey has been a key backer for the opposition rebels. Turkey used its Syrian proxies to push back Kurdish forces which pose a threat at its southern border.
  - ♦ The political development in Syria comes with uncertainties for Turkey as the vacuum generated after Assad's withdrawal could be potentially utilized by anti-Turkey Kurdish forces.

Source: TH

## PREVENTING MALARIA USING GENETICALLY MODIFIED MALARIA PARASITES

### Context

- In a radical approach, scientists have shifted their focus from genetic modification of malaria-causing mosquitoes to malaria-causing parasites.

### About

- Traditionally, efforts to control malaria have focused on mosquito vectors.
- Some key approaches include:
  - ♦ **Radiation-Sterilised Mosquitoes:** Release of sterilised male mosquitoes prevents fertilisation, reducing mosquito populations.
  - ♦ **Slowing Parasite Growth in Mosquitoes:** Genetic engineering slows the growth of Plasmodium parasites within mosquito guts, halting the transmission to humans.
  - ♦ **Genetically Modified Mosquitoes:** Mosquitoes are engineered to thrive and spread genetic resistance to Plasmodium parasites through mating, reducing transmission rates.

### Life Cycle of Malaria Parasite

- Malaria-causing parasites **first enter the human liver** after a mosquito bite.
- Infection and symptoms occur only when the parasites move from the liver into the bloodstream.

### How the Modification Works?

- **Immune Priming:** Genetically modified parasites act like a vaccine, priming the immune system during the liver stage to shield individuals from future infections.
- **Controlled Growth Arrest:** Parasite growth is arrested on **day six** (late-arresting parasite),

allowing sufficient time for immune system activation before the parasite is killed.

- **Early vs. Late Arrest:** Early arrest (day one) limits immune exposure, reducing effectiveness, whereas late arrest enhances immune priming for better protection.

### Significance of the Development

- **Vaccine-Like Effect:** Genetically modified parasites act as a **natural immune** booster, providing protection similar to a vaccine.
- **Targeted Approach:** Unlike methods focusing solely on mosquitoes, modifying parasites directly disrupts the Plasmodium life cycle, reducing the risk of disease.
- **Overcoming Resistance:** With rising insecticide resistance in mosquitoes and drug resistance in parasites, this approach offers a promising alternative strategy.
- **Enhanced Efficacy:** Late-arresting parasites allow for stronger immune system activation, increasing the effectiveness of malaria prevention.

### Challenges and Concerns

- **Biosafety Issues:** The release and use of genetically modified organisms (GMOs) carry biosafety risks that must be addressed.
- **Ethical Considerations:** Genetic modification of parasites raises ethical questions about altering natural biological systems.

### What is Malaria?

- **Malaria** is a life-threatening disease spread to humans by some types of mosquitoes. It is mostly found in tropical countries.
- **Transmission:** It is caused by **plasmodium protozoa**. The plasmodium parasites spread through the bites of infected female Anopheles mosquitoes. Blood transfusion and contaminated needles may also transmit malaria.
- **Types of parasites:** There are 5 Plasmodium parasite species that cause malaria in humans and 2 of these species – **P. falciparum** and **P. vivax** – pose the greatest threat. The other malaria species which can infect humans are **P. malariae**, **P. ovale** and **P. knowlesi**.
  - ♦ **P. falciparum** is the **deadliest malaria parasite** and the most prevalent on the African continent. **P. vivax** is the dominant malaria parasite in most countries outside of sub-Saharan Africa.
- **Symptoms:** Fever and flu-like illness, including chills, headache, muscle ache and fatigue.

Source: TH

## FDI INFLOWS INTO INDIA CROSS \$1 TRILLION

### Context

- Foreign Direct Investment (FDI) inflows into India have surpassed the \$1 trillion mark in the April 2000-September 2024 period.

### What is Foreign Direct Investment (FDI) ?

- It refers to **investments made by foreign entities** (individuals or companies) in the business interests of another country, typically in the form of **ownership or control of enterprises**.
- At present, **FDI is prohibited** in lottery, gambling and betting, chit funds, Nidhi company, real estate business, and manufacturing of cigars, cheroots, cigarillos and cigarettes using tobacco.

### Routes for FDI in India

- Automatic Route:** No prior approval is required.
  - Investors need to inform the Reserve Bank of India (RBI) after making the investment.
  - Most sectors, such as manufacturing and software, fall under this route.
- Government Approval Route:** Requires prior approval from the concerned Ministry or Department.
  - Sectors such as telecom, media, pharmaceuticals, and insurance fall under this route.

### Trends in FDI Inflows

- The cumulative amount of FDI includes equity, reinvested earnings and other capital.
- Since 2014**, India has attracted \$667.4 billion in cumulative FDI inflows, marking a **119% increase** over the preceding decade (2004-2014).
- Source: 25%** of the FDI came through the **Mauritius route**.
  - It was followed by **Singapore (24%), the U.S. (10%), the Netherlands (7%), Japan (6%), the U.K. (5%), the UAE (3%)** and Cayman Islands, Germany and Cyprus accounted for 2% each.
- The key sectors** attracting the maximum inflows include the **services segment, computer software and hardware, telecommunications, trading, construction development, automobile, chemicals, and pharmaceuticals**.

### Importance of FDI

- Infrastructure Development:** India requires significant investments to improve infrastructure and boost growth.

- Balance of Payments (BoP):** FDI helps bridge the current account deficit by bringing in foreign capital.
- Currency Stability:** Healthy inflows support the value of the **rupee** in global markets.
- Technology Transfer and Employment:** FDI brings **modern technology** and creates jobs across sectors.

### Challenges

- Geopolitical Tensions:** Ongoing conflicts and trade wars disrupt **global supply chains** and affect investor sentiment.
- Regulatory Issues:** Complex **approval processes** and varying sectoral caps can deter investors.
- Global Economic Uncertainty:** Recession risks and high inflation globally can keep **capital flows volatile**.
- Infrastructure Bottlenecks:** Delays in **project execution** and inadequate infrastructure remain challenges.

### Steps taken by Government

- Liberalized FDI Policy:** Increased FDI limits in defense (74%), insurance (74%), and single-brand retail (100%).
- Production-Linked Incentive (PLI) Schemes:** Launched in sectors like electronics, pharma, textiles, and automobiles to attract foreign investment.
- Infrastructure Development:** Programs like Gati Shakti, Bharatmala, and Sagarmala focus on improving connectivity.
- Digital Ecosystem:** Promotion of digital payments, e-governance, and technology-driven reforms.

### Way Ahead

- Prioritize Infrastructure Capex:** Ensure timely project execution and attract public-private partnerships (PPPs).
- Workforce Skilling:** Collaborate with the private sector to upskill the workforce to meet industry demands.
- Strengthen R&D and Innovation:** Promote research and development to enhance productivity and innovation in key sectors.

Source: TH

## RAILWAYS (AMENDMENT) BILL 2024 INTRODUCED

### In Context

- The **Railways (Amendment) Bill, 2024** was introduced by the Union Minister of Railways in the Lok Sabha, proposing significant reforms to **enhance the autonomy and efficiency of Indian Railways**.

### Key Objectives of the Bill

- Statutory Backing to Railway Board:** Amends the Railways Act, 1989, to provide legal sanction to the Railway Board, which has operated without statutory backing since its inception.
- Decentralisation of Powers:** Grants greater autonomy to railway zones to manage budgets, infrastructure, and recruitment independently.
- Establishment of an Independent Regulator:** Introduces an autonomous body to regulate tariffs, ensure safety, and facilitate private sector participation.
- Simplification of Legal Framework:** Merges the Indian Railway Board Act, 1905, with the Railways Act, 1989.

### Proposed Reforms and Structural Changes

- Independent Regulator:** Addresses issues like tariff regulation, infrastructure access, and service standards.
  - Recommendation initially made by the 2015 Committee on Restructuring Railways.
- Autonomy to Railway Zones:** Decentralises operational and financial decision-making.
  - Supported by the **Sreedharan Committee (2014)**.
- Appointment and Composition of Railway Board:** Empowers the government to define the Board's structure, qualifications, and appointment processes for members and the Chairman.
- Infrastructure Upgrades:** New Section 24A enables expedited superfast train operations and infrastructure upgrades. For instance, extending the Arunachal Express via the Siwan-Thawe-Kaptanganj-Gorakhpur route is expected to benefit Bihar, with an estimated cost of Rs. 300 crore for upgrades and Rs. 250 crore annually in recurring expenditures.

### Potential Benefits

- Improved Governance:** Streamlining the legal framework and clarifying the Railway Board's role can lead to better governance and accountability.

- Enhanced Efficiency:** Decentralization and autonomy for zones can result in faster project implementation, better resource utilization, and improved service delivery.
- Increased Investment:** An independent regulator can create a more level playing field for private players, attracting investment in railway infrastructure.
- Regional Development:** Provisions like those for extending the Arunachal Express demonstrate the potential for targeted infrastructure development in specific regions.

### Concerns and Way Ahead

- Privatization Fears:** The opposition's concern about potential privatization needs careful consideration. While private sector participation can bring in investment and expertise, safeguarding public interest and accessibility for all remains crucial.
- Autonomy vs. Control:** Balancing increased autonomy for zones with effective oversight and accountability will be essential. The government's role in Board appointments needs to be transparent and ensure the Board's independence.
- Passenger Welfare:** Addressing concerns about passenger concessions and ensuring affordable fares for vulnerable sections of society is important for maintaining the railways' social responsibility.

Source: FE

## DE-DOLLARISATION & HEDGING AGAINST DOLLAR RELIANCE

### Context

- Recently, the Reserve Bank of India (RBI) has clarified that its recent measures, such as allowing **Vostro accounts** and promoting trade in domestic currencies, are aimed at diversifying risk rather than pursuing outright '**de-dollarisation**'.

### What is De-dollarization?

- It describes a process of moving away from the world's reliance on the U.S. dollar (USD) as the chief reserve currency.
- It refers to shrinking the influence that the U.S. dollar has on the economies of other countries.

### Historical Context

- The **U.S. dollar** has been the world's primary reserve currency since the **Bretton Woods Agreement in 1944**.

- It has provided the U.S. with significant economic advantages, including lower borrowing costs and greater influence over global financial systems.
- However, the dominance of the dollar has also led to concerns about its potential misuse as a tool of economic coercion.

### Reasons For De-dollarisation

- **Economic Sanctions:** The imposition of US sanctions on countries like **Russia and Iran** has pushed them to seek alternatives to the US dollar to avoid economic isolation.
- **Diversification of Risk:** Nations are looking to reduce their dependence on the dollar to mitigate **risks associated with fluctuations in US monetary policy.**
  - ♦ It helps them maintain greater control over their own economic policies.
- **Strength of the Dollar:** A strong US dollar can lead to higher costs for imports and debt repayments in other countries, exacerbating economic challenges.
- **Geopolitical Shifts:** The rise of other major economies, such as China, has led to increased use of their currencies in international trade.
  - ♦ For instance, Russia and China conduct a significant portion of their trade in their national currencies.
- **BRICS Initiatives:** The BRICS nations have discussed the possibility of a shared currency to facilitate trade among member countries and reduce reliance on the dollar.

### Why Not De-dollarisation?

- **Geopolitical Considerations:** The **rise of the Chinese yuan** as a potential challenger to the US dollar complicates the de-dollarisation narrative.
  - ♦ India is cautious about increasing its reliance on the yuan, especially given the geopolitical tensions with China.
- **Economic Stability:** The US dollar remains the most stable and widely accepted currency for international trade.
  - ♦ A sudden shift away from the dollar could disrupt trade and economic stability. The RBI's approach is to de-risk rather than destabilize the economy.
- **BRICS Dynamics:** The geographical and economic diversity among BRICS nations poses significant challenges.

- ♦ Unlike the Eurozone, BRICS countries do not have the same level of economic integration or geographical proximity.
- **US Trade Relations:** Recent threats from US President-elect Donald Trump to impose tariffs on BRICS countries if they reduce dollar reliance underscore the potential economic repercussions of de-dollarisation.
  - ♦ Maintaining a balanced approach helps India avoid such punitive measures.

### Strategic Measures By India: Hedging Against Dollar Reliance

- **India's economy** is significantly **integrated into the global financial system**, where the **US dollar dominates.**
  - ♦ It poses risks, especially during periods of dollar volatility or geopolitical tensions.
- **Gold Purchases:** The RBI has significantly increased its gold reserves, aligning with global trends among central banks to diversify away from a dollar-dominated system.
- **Local Currency Trade Agreements:** By promoting transactions in **domestic currencies and allowing Vostro accounts** and entering local currency trade agreements, the RBI aims to reduce the risks associated with dollar dependence without completely abandoning it.

#### Vostro and Nostro Accounts

- **Both Vostro and Nostro** are technically the **same type of account**, with the difference being who opens the account and where.
- For example, if an Indian bank wants to open an account in the United States, it will get in touch with a bank in the US, which will open a Nostro account and accept payments for SBI in dollars.
- The account opened by the Indian bank in the US will be a **Nostro account** for the Indian bank, while for the US bank, the account will be considered a **Vostro account**.

Source: IE

## INDIA'S GEOSPATIAL MARKET TO REACH RS 25,000 CRORE BY 2025

### Context

- According to **India Geospatial Market Outlook 2024**, India's geospatial market is forecast to grow at a compound annual growth rate (CAGR) of **16.5%** to reach Rs **25,000 crore by 2025**.



- ◆ Between 2019 and 2024, **\$1 billion** has been invested across 126 companies.

### What is Geospatial Technology?

- The geospatial technologies comprises **location-based analytics, real-time data mapping, hyperspectral imaging,** and drone-based surveys.
- These tools offer critical information for sectors such as **Urban Development, Infrastructure Development, Climate Studies (Deep Ocean Mission),** and **Agriculture** etc.

### Significance of Geospatial Technologies

- **Agriculture:** Precision agriculture supported by drones and satellite imagery improves crop yield and resource utilization.
- **Disaster Management:** Geospatial data enables early warnings for floods, droughts, and natural disasters, enhancing preparedness.
- **Urban Development:** Smart cities use GIS for traffic management, waste collection, and public services.
- **Environmental Monitoring:** Helps track deforestation, water bodies, and pollution, supporting climate action goals.
- **Defence and Security:** Enables border surveillance, mapping and strategic operations.

### Government Initiatives

- **PM Gati Shakti** focuses on infrastructure development using real-time mapping.
- **The National Geospatial Policy 2022** aims to democratize geospatial data and enhance public-private partnerships.
- **Smart Cities Mission** uses location-based analytics for improved urban planning.

### Technological Advancements

- **Hyperspectral Imaging:** It Captures hundreds of light wavelengths, enabling applications such as;
  - ◆ Early detection of crop diseases and soil nutrient levels.
  - ◆ Monitoring water pollution and methane leaks.
- **Drone Technologies:** Companies like ideaForge have revolutionized data collection through real-time, high-resolution mapping, offering centimeter-level accuracy for sectors like defence and mining.

### Challenges

- **Data Security:** Geospatial data is sensitive, posing national security risks.

- **Lack of Awareness:** Limited awareness among small enterprises about geospatial applications.
- **Infrastructure Gap:** Ensuring widespread access to geospatial infrastructure requires significant investment.
- **Skill Gap:** Need for trained professionals in geospatial data analysis and drone technologies.

### Way Ahead

- **Policy Implementation:** **The National Geospatial Policy 2022** must focus on data sharing frameworks and encouraging public-private collaborations.
- **Capacity Building:** Train professionals in geospatial technologies through academic programs and research incentives.
- **Boosting Startups:** Promote indigenous startups like **Skyroot Aerospace** and **ideaForge** to strengthen domestic capabilities.
- **Global Partnerships:** Collaborate with global space agencies and private firms to expand India's geospatial exports.

Source: ET

## INDIA EXPANDS WORLD'S LARGEST GRAIN STORAGE PLAN IN COOPERATIVE SECTOR

### In Context

- Under the pilot phase of the ambitious **World's Largest Grain Storage Plan in the cooperative sector**, godowns have been successfully constructed at **Primary Agricultural Credit Societies (PACS)** in 11 states across India.
  - ◆ PACS are **village level cooperative credit societies** that serve as the last link in a three-tier cooperative credit structure headed by the **State Cooperative Banks (SCB) at the state level.**

### Core Elements of the Plan

- **Decentralization:** Shifting the focus of grain storage from large central warehouses to smaller, localized units at the PACS level. This has multiple advantages:
  - ◆ **Reduced Transport Costs:** Farmers can store their produce closer to their farms, minimizing transportation expenses.
  - ◆ **Reduced Post-harvest Losses:** Faster storage after harvest reduces spoilage and wastage.

- ◆ **Increased Accessibility:** Farmers, especially in remote areas, have easier access to storage facilities.
- ◆ **Empowering PACS:** The plan aims to revitalize PACS by diversifying their role beyond credit disbursement. This can make them more financially sustainable and enhance their contribution to rural development.
- ◆ **Convergence of Schemes:** The plan smartly utilizes existing government schemes like AIF and AMI to provide financial support to PACS, ensuring efficient utilization of resources.
- **Multi-faceted Infrastructure:** Besides godowns, the plan encourages PACS to establish other agricultural infrastructure like warehouses, processing units, and custom hiring centers. This integrated approach can create a more robust and efficient agricultural ecosystem.
- **Financial Support:** The initiative integrates subsidies and interest subventions through various government schemes, such as the **Agriculture Infrastructure Fund (AIF) and the Agricultural Marketing Infrastructure Scheme (AMI)**.
  - ◆ Under the AIF scheme, PACS receive a **3% interest subvention** on loans up to 2 crore, with a repayment tenure of seven years (2+5 years). The AMI scheme provides a 33.33% subsidy to PACS for constructing storage units
- **Key Supporting Agencies:** National Cooperative Development Corporation (NCDC), National Bank for Agriculture and Rural Development (NABARD), NABARD Consultancy Services (NABCONS).

#### Other initiatives to enhance grain storage infrastructure

- **Gramin Bhandaran Yojana (Rural Godown Scheme):** This scheme offers subsidies to individuals and organizations for constructing or renovating rural godowns, thereby increasing storage capacity at the farm level.
- **Central Warehousing Corporation (CWC):** Established in 1957, the CWC operates over 400 warehouses across India, providing scientific storage and handling services for various commodities, including agricultural produce.
- **National Centre for Cold-chain Development (NCCD):** NCCD focuses on developing cold-chain infrastructure to minimize post-harvest losses of perishable commodities.

Source: DD News

## NEWS IN SHORT

### ANGAMI NAGA TRIBE

#### In Context

- The **Stone-Pulling Ceremony** is a traditional practice of the Angami Naga tribe, symbolizing unity and cooperation.

#### About Angami Naga Tribe

- **Location and Ethnic Background:**
  - ◆ **Region:** Prominent Naga tribes primarily reside in the Kohima district of Nagaland, with some recognized in Manipur.
  - ◆ **Migration:** Ancestors migrated from Myanmar to Nagaland.
  - ◆ **Ethnicity:** Belong to the Mongoloid race.
- **Language:**
  - ◆ **Tenyidie:** Most commonly spoken language among the Angami Nagas in Nagaland.
  - ◆ **Nagamese:** A pidgin language derived from Assamese, Bengali, Hindi, and Nepali, used as a lingua franca.
- **Culture and Economy:**
  - ◆ **Agriculture:** Known for terrace wet cultivation.
  - ◆ Practice shifting (Jhum) cultivation.
  - ◆ **Animal Husbandry:** A significant livelihood activity.
  - ◆ **Craftsmanship:** Renowned for cane and bamboo basketry.
  - ◆ **Signature product:** Khophi, a utility basket.
- **Religion:** Majority have embraced Christianity.
- **Society:** Patriarchal and patrilineal.
- **Festival:** Sekrenyi is the most important festival, celebrated with great enthusiasm.

Source: TH

## WORLD MEDITATION DAY

#### In News

- December 21 is now designated as **World Meditation Day** after a UN General Assembly draft resolution co-sponsored by India and adopted unanimously.
  - ◆ It is aimed at human well-being, including mental, emotional, physical and spiritual dimensions.

#### India's Role

- India, along with other nations in the core group, guided the resolution, emphasizing its philosophy of **Vasudhaiva Kutumbakam ("The world is one family")**.
- India's global advocacy for practices like yoga and meditation aligns with **its civilizational values**.

### Significance of December 21

- **Winter Solstice:** Marks the shortest day and longest night of the year in the Northern Hemisphere.
- **Indian Context:** Connected to festivals like Makar Sankranti, symbolizing renewal, prosperity, and hope. Ancient Indian texts like **Surya Siddhanta reference solstices in calendrical and temple alignments.**
- Falls exactly **six months after International Yoga Day (June 21).**

Source: TH

## COMMISSION ON NARCOTIC DRUGS (CND)

### Context

- India has been chosen to **Chair the 68th Session** of the Commission on Narcotic Drugs (CND).
  - ◆ This is the first time that India has been named to Chair it.

### About

- It was established in **1946** by the **United Nations Economic and Social Council (ECOSOC)**, it is the principal policy-making body of the United Nations on drug-related matters.
- It is mandated to monitor global drug trends, support Member States in formulating balanced policies, and oversee the implementation of the major international drug conventions.
- The CND has 53 member states that are elected by ECOSOC.
- It is chaired by a Bureau including one member per Regional Group.

Source: BS

## OILFIELDS AMENDMENT BILL, 2024

### Context

- The Rajya Sabha passed the Oilfields (Regulation and Development) Amendment Bill, 2024.
  - ◆ The Bill amends the Oilfields (Regulation and Development) Act of 1948.

### Major Highlights

- **Definition of mineral oils expanded:** The Bill expands the definition to include: any naturally occurring hydrocarbon, coal bed methane, and shale gas/oil.
  - ◆ It clarifies that mineral oils will not include coal, lignite or helium.
- **Introduction of petroleum lease:** The Bill replaces the mining lease with a petroleum lease, which also covers a similar set of activities.

- **Private Investment:** The Bill includes several provisions for encouraging investment from private players to spur domestic production of petroleum and other mineral oils.
- **Decriminalisation of offences:** The Bill provides that the violation of Rules will be punishable with a penalty of Rs 25 lakh.
- **Adjudication of penalties:** The central government will appoint an officer of the rank of Joint Secretary or above for adjudication of penalties.

### Criticisms and Concerns

- Concerns were raised about how the **Bill would affect the rights of states**, given that Indian states have the power to tax mining activities.
- **Entry 50 of the State List** in the Constitution gives states the power to impose taxes on “mineral rights”. By reframing the Oilfields Act, it gives Parliament the power to create laws regarding the “Regulation and development of oilfields and mineral oil resources”.

Source: IE

## RBI'S MULEHUNTER.AI TOOL

### Context

- The Reserve Bank of India (RBI) has developed an **AI/ML-based model called MuleHunter.ai.**
- **About**
- **Aim:** To tackle the **issue of mule accounts**, which are used for financial fraud.
  - ◆ It uses machine learning to quickly and accurately identify suspicious accounts by tracking illicit fund flows.
  - ◆ It will help banks detect fraud more effectively and efficiently, enhancing the security of India's financial ecosystem.
- **A mule account** is a bank account used by criminals to launder illicit funds, often set up by unsuspecting individuals lured by promises of easy money or coerced into participation.
  - ◆ The transfer of funds through these highly interconnected accounts makes it difficult to trace and recover the funds.
- **Financial Frauds:** According to the National Crime Records Bureau (NCRB), online financial frauds account for **67.8% of cybercrime complaints.**
  - ◆ Mule account cases have been on the rise, and **53%** of the total fraud threats to financial institutions were caused by money mules in 2023.

Source: BS